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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------------|-------------|----------------------|------------------------|------------------|--|
| 10/618,785 | 07/14/2003 | Philip D. Nguyen | 201-IP-006110U1 | 7336 | |
| 7590 03/08/2005 | | | EXAMINER | | |
| Robert A. Kent | | | COLLINS, GIOVANNA M | | |
| Halliburton Ene 2600 South 2nd | | ART UNIT | PAPER NUMBER | | |
| Duncan, OK 73536 | | | 3672 | | |
| | | | DATE MAILED: 03/08/200 | 5 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|--|--|--|------------|--|--|--|
| | | Applic | ation No. | Applicant(s) | | | | |
| Office Action Summary | | 10/618 | 3,785 | NGUYEN ET AL. | / | | | |
| | | Exami | ner | Art Unit | | | | |
| | | | na M. Collins | 3672 | \ | | | |
| Period fo | The MAILING DATE of this commu or Reply | nication appears on | the cover sheet w | ith the correspondence addre | ss \ | | | |
| A SH THE - Exter after - If the - If NC - Failu Any | ORTENED STATUTORY PERIOD IN MAILING DATE OF THIS COMMUN Insions of time may be available under the provision SIX (6) MONTHS from the mailing date of this comperiod for reply specified above is less than thirty (a period for reply is specified above, the maximum is reto reply within the set or extended period for reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b). | IICATION. s of 37 CFR 1.136(a). In no munication. 30) days, a reply within the tatutory period will apply an y will, by statute, cause the | o event, however, may a a statutory minimum of thir d will expire SIX (6) MON application to become Al | reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this commit BANDONED (35 U.S.C. § 133). | unication. | | | |
| Status | | | | | | | | |
| 1)[X] | Responsive to communication(s) fil | ed on <i>14 July 200</i> 3 | 1 | | | | | |
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| 3) | | | | | | | | |
| -,ك | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | on of Claims | | | | | | | |
| 4)⊠ 5)□ 6)⊠ 7)⊠ | Claim(s) <u>1-32</u> is/are pending in the 4a) Of the above claim(s) is/are Claim(s) is/are allowed. Claim(s) <u>1-11 and 18</u> is/are rejected Claim(s) <u>12-17 and 19-32</u> is/are ob Claim(s) are subject to restri | are withdrawn from d. jected to. | | | | | | |
| Applicati | on Papers | | | | | | | |
| | The specification is objected to by the | ne Examiner | | | | | | |
| • |) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| ,— | Applicant may not request that any obje | ,— | • | • | | | | |
| | Replacement drawing sheet(s) including | g the correction is rec | quired if the drawing | (s) is objected to. See 37 CFR 1 | I.121(d). | | | |
| 11) | The oath or declaration is objected | to by the Examiner. | Note the attache | d Office Action or form PTO- | 152. | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| a) | Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internations of the attached detailed Office actions. | or documents have be or documents have be of the priority docu onal Bureau (PCT f | peen received. peen received in Auments have been Rule 17.2(a)). | application No received in this National Sta | ige | | | |
| Attachmen | t(s) | | | | | | | |
| 1) 🛛 Notic | e of References Cited (PTO-892) | | | Summary (PTO-413) | | | | |
| 3) 🔀 Infor | e of Draftsperson's Patent Drawing Review (mation Disclosure Statement(s) (PTO-1449 o r No(s)/Mail Date <u>20030714</u> . | | Paper No(| s)/Mail Date nformal Patent Application (PTO-15 | 2) | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 112

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 2-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 2-9 depend from claim 1 which recites the step of injecting an expandable member into a fracture. Claims 2 then recites the member is compress and inserted into a mass of fibrous network. As currently written, the claims appear to disclose the expander member is injected into a fracture and then compressed and inserted into a mass of fibrous network. Claim 8 further recites injecting the newly formed structure into a fracture. It is unclear at what step the expandable member is injected into the fracture.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

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patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen 5,908,073.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Referring to claim 1, Nguyen discloses a method of forming an in-situ filter for controlling flowback of proppants injection into fracture of the formation comprising the step of injecting an expandable member into the fracture (col. 2, lines 5-8).

Referring to claim 18, Nguyen discloses a system comprises a plurality of encapsulated compressed expandable members (see fig. 3, 10) placed in a fracture.

2. Claims 1 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen 6,752,208.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Referring to claim 1, Nguyen discloses a method of forming an in-situ filter for controlling flowback of proppants injection into fracture of the formation comprising the step of injecting an expandable member into the fracture (col. 2, lines 16-25).

Referring to claim 18, Nguyen discloses a system comprises a plurality of encapsulated compressed expandable members (see figs. 3-5) placed in a fracture.

3. Claims 1 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hussain et al. 6,528,157.

Hussain discloses a method of forming an in-situ filter for controlling flowback of proppants injection into fracture of the formation comprising the step of injecting an expandable member (fibers can expand outward) into the fracture (Fig. 1a).

Referring to claim 18, Hussain discloses a system comprises a plurality of encapsulated compressed expandable members (10) placed in a fracture.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hussain et al. '157 in view of Montgomery 6,070,666.

Hussain discloses an in situ filter for controlling flow back of proppants comprising a plurality of interspersed expandable members (10, fibers can be compressed and expand outwardly). Hussain does not disclose a network of fibrous material. Montgomery teaches using fibrous material in a fracture to prevent slumping of a proppant (col. 3, lines 47-55).

Referring to claim 11, Hussain, as modified does not disclose the fibrous network is stainless steel wool or composite fibrous sponge. However, Montgomery does disclose the fibrous can comprises metal fibers and stainless steel wool is a well known metal fiber. AS one of ordinary skill in the art would be familiar with the use of stainless steel wool, it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the invention disclosed by Hussain to use stainless steel wool as suggested by Montgomery.

Allowable Subject Matter

6. Claims 12-17 and 19-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707.

The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Supervisory Patent Examiner
Technology Center 3670

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